WHAT IS CLAIMED IS:

1. A method for controlling traffic in a wireless transmission system wherein information is passed from a remote unit to a base station along a first wireless channel and information is passed from the base station to a remote unit along a second wireless channel, the method comprising the steps of:

dividing a frame of data into a plurality of blocks of data;

detecting idle status information from said second wireless channel;

when said idle status information indicates said base station is accessible, transmitting a first block of data of said plurality of blocks in a first time slot along said first wireless channel;

monitoring said second wireless channel for a plurality of time slots; and

if one of said time slots indicates that said first block of data has been received by said base unit, transmitting the remaining data blocks from the plurality of data blocks constituting said frame, wherein the transmitting occurs in time slots following the indication that said first block of data has been received.

2. The method of claim 1 wherein said plurality of time slots cover a time interval that corresponds to a round trip time between the remote unit and the base unit.

3. The method of claim 2 wherein said round trip time accounts for signal propagation delay over the first and second wireless channels.

4. The method of claim 2 wherein said round trip time accounts for signal processing at said base unit.

5. The method of claim 4 wherein said round trip time accounts for signal propagation delay over the first and second wireless channels.

6. The method of claim 5 wherein said expected round trip time accounts for signal processing at the remote unit.

7. The method of claim 2 wherein said one of said time slots corresponds to that time slot at the end of said time interval.

8. The method of claim 7 wherein if another time slot along said second channel, within said time interval and preceding said one of said time slots has idle status information that indicates that the first channel is busy, then said remote unit delays further data transmission.

9. A method for improving throughput along a data channel in a wireless network, the method comprising the steps of:

dividing a frame of data into a plurality of data blocks;

detecting that said data channel is idle;

transmitting one of said plurality of data blocks when said data channel is idle;

determining whether said one of said plurality of data blocks has been received by a base unit; and

forwarding the remaining data blocks of said plurality of data blocks corresponding to said frame of data when it is determined that said base unit has received said one of said plurality of data blocks.

10. The method of claim 9 wherein said step of detecting comprises the step of checking an idle status indicator transmitted by said base unit along a second data channel.

11. The method of claim 9 wherein said step of transmitting comprises the step of inserting said one of said plurality of data blocks into a time slot for data transmission on said data channel.

12. The method of claim 11 wherein said step of determining comprises the steps of:

checking an idle status indicator transmitted by said base unit along a second data channel.

13. The method of claim 12 wherein said step of checking includes reviewing a status indicator in a time slot at a time interval following the occurrence of the step of transmitting wherein said time interval corresponds to a round trip time between a remote unit and the base unit.

14. The method of claim 13 wherein said round trip time accounts for signal propagation delay over the first and second wireless channels.

15. The method of claim 13 wherein said round trip time accounts for signal processing at said base unit.

16. The method of claim 13 wherein said round trip time accounts for signal processing at the remote unit.

17. A method for improving data flow from a remote unit to a base unit along a data channel, the method comprising the steps of:

checking an idle status indicator transmitted from the base unit along a second channel;

when said indicator indicates that said base unit is accessible, transmitting a first portion of a frame of data from the remote unit to said base unit in a first time slot along said data channel;

after transmitting said first portion, examining time slots from said base unit to determine whether the idle status indicator has changed; and

delaying transmission of a remainder of said frame of data until said step of

examining determines that the idle-status indicator has changed in a round trip time slot that occurs at a time corresponding to a communication round trip time between the remote unit and the base unit.

18. The method of claim 17 further comprising the step of detecting that a transmission for another remote unit occurred prior to the step of transmitting by noting a change in idle status in a time slot that precedes said round trip time slot.

19. The method of claim 17 further comprising the step of detecting that the transmitted first portion was not successfully received by the base station.

20. The method of claim 19 wherein said step of detecting comprises the steps of detecting that the round trip time slot provides information that the idle-status indicator has not changed or that the transmitted first portion was not successfully decoded.

21. A method for enhancing data throughput in a fixed wireless communication system that includes a plurality of remote units, a base unit, a forward communication channel from the base unit to said plurality of remote units, and a shared reverse communication channel from said remote units to said base unit wherein each communication channel comprises a plurality of time slots, the method comprising the steps of:

at a first remote unit,

detecting an idle status indicator transmitted on a first time slot on said forward channel;

transmitting a first portion of a data package to said base unit on the reverse communication channel in a time slot following a detection of an idle status; and

monitoring an idle status indicator and a decode indicator in time slots along the forward channel after transmitting said first portion;

at the base unit,

receiving data in a time slot from the reverse channel,

attempting to decode the received data,

in a time slot along the forward channel,

changing an idle status indicator to indicate a busy state,

setting a decode indicator to reflect whether the decoding attempt was successful, and

transmitting said time slot along the forward channel;

wherein when said first remote unit receives a round trip time slot that occurs at a round-trip time after transmitting the first portion and said round trip time slot has an idle status indicator that indicates a busy status and a decode indicator that indicates that the base unit successfully decoded said first portion, said first remote unit transmits a remainder of said data package in a plurality of subsequent time slots.

22. The method of claim 21 wherein at a second remote unit steps include,

detecting an idle status indicator transmitted on a second time slot, that follows said first time slot on said forward channel;

transmitting a first portion of a second data package to said base unit on the reverse communication channel in a time slot that follows the time slot used by the first portion transmitted by said first remote unit;

monitoring the idle status indicator and decode indicator in time slots after transmitting said first portion of said second data package;

detecting that said base unit has changed its idle status in the round trip slot associated with the first remote unit; and

in response to said detecting of a change in idle status, delaying transmission of a remainder of said second data package even if said first portion of said second data package was successfully received by said base unit.